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THE ASSOCIATION OF COMMONWEALTH UNIVERSITIES

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Dear Professor Ungku Aziz,

I write to let you know that I have sent you today, under separate second class airmail cover, 30 photocopies of your Introduction to the Universities of Malaysia as it will appear in the 1979 Commonwealth Universities Yearbook. The Yearbook itself is still at the binders but your usual complimentary copy will be despatched to you as soon as the bound volumes become available.

Yours sincerely,

T. Craig

T. CRAIG
Joint Editor

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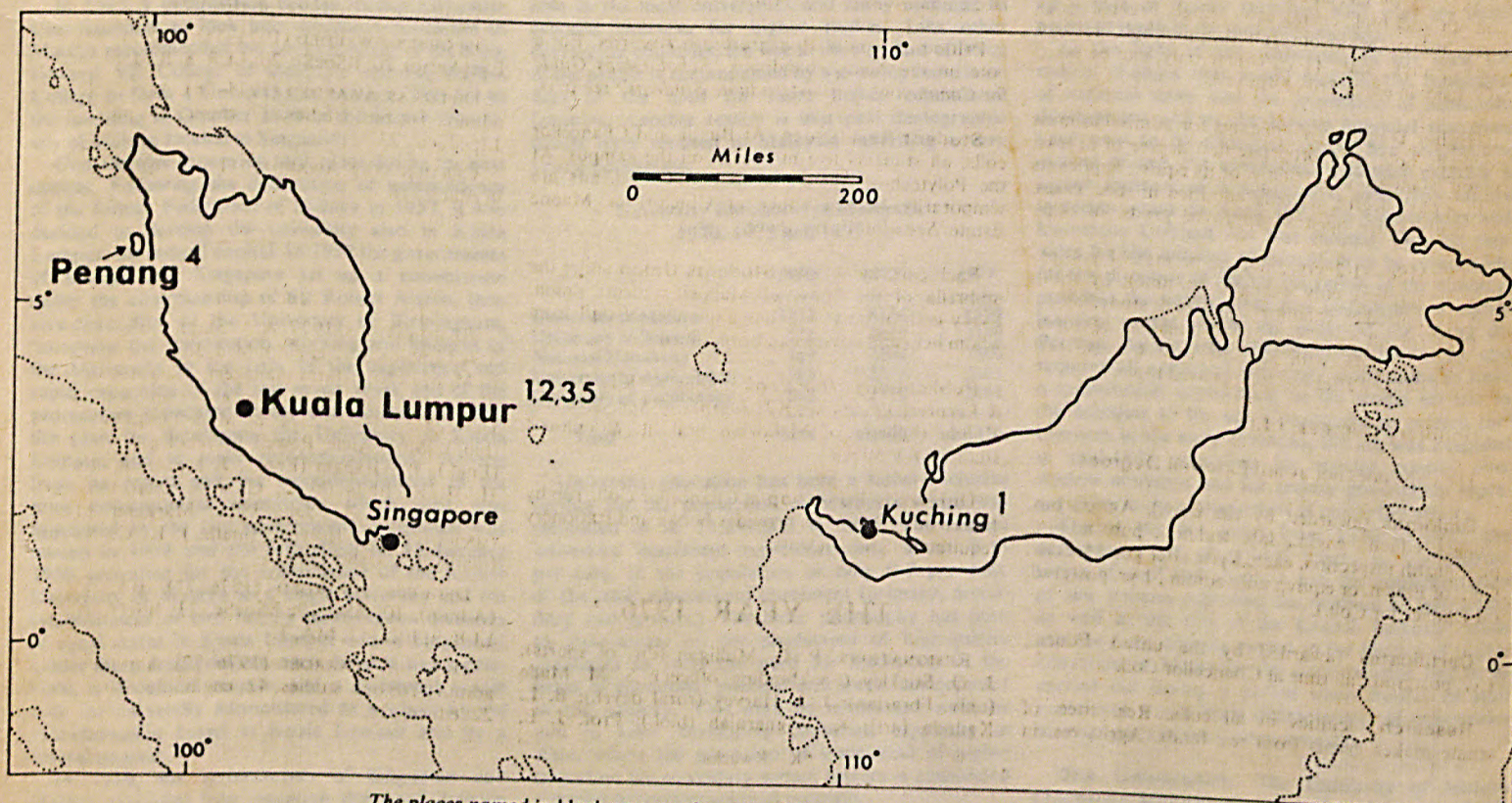
c.c. Mr C.T. Lim, Registrar

TC/ab

MALAYSIA

- 1 University of Agriculture, Malaysia (p. 1782)
- 2 University of Malaya (p. 1786)
- 3 National University of Malaysia (p. 1794)
- 4 University of Science, Malaysia (p. 1799)
- 5 University of Technology Malaysia (p. 1804)

(The names of the universities in Bahasa Malaysia are: University of Agriculture, Malaysia—Universiti Pertanian Malaysia; University of Malaya—Universiti Malaya; National University of Malaysia—Universiti Kebangsaan Malaysia; University of Science, Malaysia—Universiti Sains Malaysia; University of Technology Malaysia—Universiti Teknologi Malaysia.)



The places named in black type are the seats of the university institutions numbered above.

THE UNIVERSITIES OF MALAYSIA

[Contributed by Professor Ungku A. Aziz, Vice-Chancellor of the University of Malaya]

History. The idea of higher education in Malaysia dates back to 1823 when, Sir Stamford Raffles who founded Singapore, proposed the establishment of a college to provide educational and research facilities to meet the needs of the former Malay peninsula and Singapore. However, it was not until the end of the nineteenth century that any serious attempt was made to establish such an institution. An attempt was made in 1889 to start a training course for assistant surgeons. In 1905, following a public appeal for funds, the Straits Settlements and Federated Malay States Government Medical School was established in Singapore. Renamed as the King Edward VII Medical School in 1912 and the King Edward VII College of Medicine in 1921, its licence in medicine and surgery was recognized by the General Medical Council of Great Britain in 1912. In 1929, Raffles College was established in Singapore to provide studies in arts and science and a hope was expressed that these colleges would form the nucleus of a future university. Closed during the Japanese occupation from 1942 to 1945, these colleges were reopened in October 1946.

In 1947, a commission headed by Sir Alexander Carr-Saunders to look into university education in Malaya recommended the amalgamation of the King Edward VII College of Medicine and the Raffles College to form a University of Malaya. This led to the founding in October 1949 of the former University of Malaya located in Singapore.

Considerable expansion took place during the next decade. Following the declaration of independence of the former Federation of Malaya in 1957, it was decided to develop the university also in Kuala Lumpur, the federal capital. In 1957 the governments of Malaya and Singapore set up a commission under the chairmanship of Sir Robert Aitken, then vice-chancellor of the University of Birmingham, 'to review the constitution, working and finances of the University in the light of the experience and rapid expansion of the last seven years and of the prospective expansion in the near future, including the plan for developing the University in Kuala Lumpur, and to make recommendations'. Arising from its report and the recommendations of the joint constitutional committee which was also appointed by the two governments, legislation was passed in 1958 and put into effect on 15 January 1959 providing for the continuance of the former University of Malaya as a single university and the establishment of two largely autonomous divisions of equal status in Kuala Lumpur and in Singapore. Under these arrangements, each division had a principal, a divisional council and a divisional senate with the university administered as a whole by the vice-chancellor based in Kuala Lumpur and by a central council.

In 1960, the governments of Singapore and Malaya indicated their intention that each division should become a separate, autonomous, national university in the respective territories. Legislation was passed in October 1961 founding the present University of Malaya on 1 January 1962 which con-

tinued to be the only university in the country until 1969.

University Education. In 1963, the former Federation of Malaya ceased to exist with the formation of *Malaysia* comprising the eleven states of the former federation, Sabah and Sarawak. Considerable social and economic changes resulted from this and the population increased to 10.5 million by 1969. Although the University of Malaya developed rapidly and had its student enrolment increased from 57 in 1957 to 6672 in 1969, it was obvious that that university alone could not meet the increasing demand for higher educational facilities.

The development of the four new universities (see 'The Universities', below) has also been rapid in the first few years of their existence. In the five-year period from 1970 to 1975 university development almost doubled as shown below. Notwithstanding this development in university education, the number of candidates who meet the minimum admission requirements far exceeds the number of places available in the local universities and many continue to proceed overseas for higher studies. Like other developing countries, the rise in the standard of living of the people is accompanied by a growing consciousness of the need for more higher educational facilities. Another reason is that past demographic trends have resulted in Malaysia inheriting a very young population.

University Enrolment in Malaysia,
1970, 1975 and 1977

	1970	1975	1977
University of Malaya	7777	8534	8598
University of Science	271	2839	3399
National University	169	2502	3860
University of Agriculture	585	2553	2961
University of Technology	692	2172	2898
Total	9494	18,600	21,716

University education has been a rather exclusive facility for the population of Malaysia which was estimated to be 12,249,000 in 1975. The current university enrolment represents only about 0.15 per cent. of the population or only 0.5 per cent. of the total educational enrolment (primary, secondary and tertiary). The basic philosophy has been to concentrate on the production of high-quality graduates to meet the need for leadership in the fields of economic, political and social development in the country. This may be contrasted with the aim in some developing countries, especially in Asia, where the provision of some kind of higher education for secondary-school leavers is considered a matter of (prime) political necessity.

Various events during the last five years have influenced the admissions, teaching and language policies of the universities. The 13 May 1969 incident, which involved communal violence, influenced

most of the political leaders in the country to accept the need to restructure society as a matter of national importance. The national philosophy is expressed in the *Rukunegara** and the economic and educational objectives of the Second Malaysia Plan (1970-75) and the Third Malaysia Plan (1976-80). Basically the aim is to provide about 55 per cent. of all facilities to the *bumiputra* or the sons of the soil, which means largely the Malay community. This involves a rather deliberate selection system in the admissions exercises, the provision of special pre-university or matriculation courses to prepare *bumiputra* students for degree courses such as medicine, engineering and science and additional tutorial opportunities in the early years of study so as to reduce the possibility of relatively higher failure rates among this group. Greater attention has to be given to the use of the national language, i.e. Bahasa Malaysia, in the teaching programmes. The national policy is that this is to be the medium of instruction in all universities by 1983. At the same time English will be retained as a second language. Special academic staff training schemes have also to be implemented so as to build up a core of locally recruited staff who are competent to teach in the national language.

In the light of the realisation of the need for radical changes that would expedite the formation of national unity and the promotion of economic development and as the limited financial resources have now to be allocated among five universities instead of one, the government has been exerting a higher measure of direction over university affairs in recent years. In April 1971 the Universities and University Colleges Act was enacted. This act provides for the minister of education to be responsible for the direction of higher education in the country, prohibits the setting up of new institutions of higher learning except under the order of the Yang di-Pertuan Agong (the constitutional monarch) and requires all approved university institutions to have a constitution conforming to the model set out in the schedule to the act. Consequent to student turbulences in the early seventies, the act was amended in mid-1975 providing for stricter control over student activities and for greater government representation in the management of university affairs.

During the five years from 1970 to 1975, the accomplishment of critical stages in the restructuring of staff and students and the implementation of new policies regarding the medium of instruction as well as the role of the English language made this the most exciting period in the history of higher education in Malaysia. All these reforms had to be carried out during a period when student or staff turbulence was a main characteristic of universities in other parts of the Commonwealth.

The Universities. The University of Malaya (*Universiti Malaya*). Established on 1 January 1962, and located in the federal territory, the univ. has nine faculties, namely, engineering, arts and social sciences, science, agriculture, medicine, education, economics & administration, dentistry and law. It

* In order to achieve a greater unity of the peoples, to maintain a democratic way of life, to create a just society in which the wealth of the nation shall be equitably shared, to ensure a liberal approach to her rich and diverse cultural traditions and to build a progressive society orientated to modern science and technology, certain principles have been laid down to guide and bind the peoples together. These principles are (a) belief in God, (b) loyalty to King and country, (c) upholding the constitution, (d) rule of law and (e) good behaviour and morality. Together they constitute the *Rukunegara*.

also has a language centre, computer centre, a centre for basic sciences, cultural centre and a university hospital with its own administration.

The University of Science, Malaysia (Universiti Sains Malaysia). Located on the island of Penang, this univ. commenced teaching in June 1969 and was promulgated a university 'to provide, promote and develop higher education in the fields of sciences, applied sciences, pharmaceutical sciences, building science and architecture, social science, humanities and education as well as to provide for research, accumulation and advancement of knowledge and the dissemination of such knowledge in the said fields of study'. It has schools of physical and mathematical sciences; biological sciences; humanities; social science; chemical sciences; applied science; pharmaceutical sciences; housing, building & planning; and centres for educational studies and policy research.

The National University of Malaysia (Universiti Kebangsaan Malaysia). This university began teaching in 1970 and moved to its new campus at Bangi, about 20 miles south of Kuala Lumpur, in October 1977. Its medical faculty, however, is located next to the General Hospital in Kuala Lumpur. The univ. has five faculties, namely, economics & management, Islamic studies, medicine, science, social science & humanities and an institute of Malay language, literature and culture. The main medium of instruction is the Malay language.

The University of Agriculture, Malaysia (Universiti Pertanian Malaysia). established as a university in October 1971, is located at Serdang about 14 miles south of Kuala Lumpur. It occupies the premises of the former College of Agriculture and has also taken over the diploma programme of that college. The univ. has seven faculties: agriculture; forestry; science and environmental studies; veterinary medicine and animal science; agricultural engineering; resource economics and agri-business; educational services; and a centre for extension and continuing education.

The University of Technology Malaysia (Universiti Teknologi Malaysia). formerly the Technical College of Kuala Lumpur. Raised to university status in 1972, it is located in the federal territory. It now has five faculties, namely, built environment, civil engineering, electrical engineering, mechanical engineering and surveying, and centres for humanities studies and science studies, and offers courses at two levels—degree and diploma. The degree course is five/six years and the diploma three years.

Constitution. Under the Universities and University Colleges Act of 1971 (amended in 1975), no higher educational institution may be established in the country unless the Yang di-Pertuan Agong is satisfied that it is expedient in the national interest to do so. Any institution of university status, when established, is a body corporate and its constitution must conform to the provisions of the model constitution which is a schedule to the act. In effect this provides for the pattern of internal government of Malaysian universities to be alike. The pattern is similar in many respects to the system in most Commonwealth universities.

The model constitution provides for: (a) the appointment of a chancellor, pro-chancellor(s), a vice-chancellor, deputy vice-chancellors, a registrar, deans of faculties or schools, a bursar and a librarian as officers of the university. The chancellor is head of the university and presides at meetings of the court, the council and the convocation when present. The vice-chancellor is the principal executive and academic officer of the university.

(b) The following main authorities to carry out the business of the university:

The Court as the supreme body of the university. Its membership includes the chancellor, the pro-chancellors, the vice-chancellor, members of the council and the senate, two persons appointed by the Yang di-Pertuan Agong, one person appointed by each of the rulers or governors of the 13 states of Malaysia, two representatives of parliament and one representative of each of the state legislatures, not more than 30 persons appointed by the chancellor on the recommendation of the vice-chancellor to represent the professional, commercial, industrial, cultural, teaching, research and learning, medical and educational organisations in Malaysia, such number of representatives of the guild of graduates as may be prescribed by statute, and the president and the secretary for the time being of the students' representative council. It meets once a year to receive the vice-chancellor's annual report, the audited accounts of the university and new statutes enacted during the year.

The Council as the executive body of the university. It has 16 members including a chairman appointed by the minister of education, the vice-chancellor, two persons appointed by the Yang di-Pertuan Agong, one person appointed by the conference of rulers, one appointed by the ruler or governor of the state in which the university is situated or by the prime minister if the university is situated in the federal territory, one appointed by the chancellor, the secretary general of the Treasury or his representative, the secretary general of the ministry of education or his representative, the director general of the public services department or his representative, and the solicitor general or his representative, and two graduates of the university appointed by the minister on the advice of the vice-chancellor. The council meets once a month and is vested with all powers of the university except in academic matters.

The Senate as the academic body of the university with the professors, deans of faculties or schools, directors of centres, heads of departments or chairmen of divisions and academic representatives as members and the vice-chancellor as chairman. It meets once a month.

The Faculty or School Board. The members of this body include the deputy deans, deputy directors, the professors, heads of departments or divisions, the majority of the academic staff with the dean of the faculty or school as chairman. It normally meets once a month and is responsible to senate for the formulation of academic policies and academic matters falling under its purview, and for the organization and promotion of its teaching, research and service programmes.

In a few universities, a centre is established instead of a faculty or school and its board comprises members as above with the director as chairman. Centres may also be set up by statute as authorities of the university and their boards of management comprise such members as may be prescribed in the statute.

The Finance Committee, a standing committee of the council, responsible for regulating and controlling the finances of the university and preparing the annual estimates of income and expenditure. Its membership consists of representatives of the council and the vice-chancellor.

The Board of Student Welfare with the vice-chancellor and such other persons appointed by the senate as members.

Other Authorities of the University prescribed by

statute such as Boards of Studies, Boards of Selection, etc.

Relationship to Government. The Universities and University Colleges Act provides for the minister of education to be responsible for the general direction of higher education and the administration of the act. The amendment to the act in 1975 provided for more heads of government departments or their representatives to serve as members of the council of all universities. Thus, government is able to ensure to some extent that all universities conform to national policies and to co-ordinate the decisions of the various universities. With this and the fact that government provides 80 per cent. or more of university finances, it is difficult to ascribe any significant degree of autonomy to universities, *de jure* or *de facto*. However, despite the changing pressures on the universities exerted by government, the universities can pursue their own academic ways so long as they do not contradict national objectives.

Since the restructuring of the universities is considered to be at least of equal importance to the pursuit of a rising gross national product per capita, a university or its more tender parts can at times be subjected to a fair degree of prodding if there is failure to conform to the national interest.

Unlike university systems in some countries of the Southeast Asian region, Malaysian university officials are not government officials although salaries and conditions of service have been related very closely to those in government as a result of the implementation of the *Report of the Royal Commission on Salaries* (for all statutory bodies and local authorities) headed by Mr. Justice Harun in January 1975 and the cabinet committee report on salaries in July 1977. This has, of course, brought the university administrative machinery to be more closely related to government. Whilst members of the universities would like to claim that the university is not comparable with certain statutory bodies which are subject to considerable government control, in reality this is not the case.

Finance. The Universities and University Colleges Act provides for parliament to make grants-in-aid to universities. In effect, the universities are all dependent on government for capital development funds and for about 85-95 per cent. of their annual operating funds. Annual incomes from fees, investment profits, house rents and sundry incomes do not exceed 15 per cent. Grants-in-aid to each of the five universities' operating funds for 1977 were: University of Malaya, MS43.5 million; University of Science, MS46.5 million; National University, MS26 million; University of Agriculture, MS22.8 million; University of Technology, MS17.4 million.

In 1977 MS273.6 million (including capital development funds) out of a total of MS1769.9 million allocated by parliament for the nation's educational programme was allocated to the universities.

The audited accounts of each university are submitted in July, following each financial year, to the minister of education to be laid before both houses of parliament.

Pre-University Education. Education in Malaysia is the responsibility of the federal government and aims to fill a three-fold function, i.e. (i) to provide a minimum of six years of primary education and three years of lower secondary education for all; (ii) to preserve and sustain the growth of languages and cultures of every community living in Malaysia;

DIRECTORY TO SUBJECTS OF STUDY

(First degrees, diplomas, certificates)

1 = may be studied as part of course leading to first degree 2 = may be studied as main part of course leading to first degree 3 = may be studied as part of course or as main part of course leading to first degree * = leads to diploma or certificate	Univ. of Agriculture	Univ. of Malaya	National Univ.	Univ. of Science	Univ. of Technology	1 = may be studied as part of course leading to first degree 2 = may be studied as main part of course leading to first degree 3 = may be studied as part of course or as main part of course leading to first degree * = leads to diploma or certificate	Univ. of Agriculture	Univ. of Malaya	National Univ.	Univ. of Science	Univ. of Technology	1 = may be studied as part of course leading to first degree 2 = may be studied as main part of course leading to first degree 3 = may be studied as part of course or as main part of course leading to first degree * = leads to diploma or certificate	Univ. of Agriculture	Univ. of Malaya	National Univ.	Univ. of Science	Univ. of Technology
Agriculture	3					Public Administration	3					Law	3	1			
Agricultural Econ. & Business	3					Rural Development	3					Malay Literature	3	2	2		
Agricultural Engineering	3					Education	3	1*	3*	2		Malaysian Affairs			1		
Agricultural Extension	3					Electronics				2		Malay Studies		3	3		
Agronomy	3					Engineering, Chemical	2					Mathematics	3	3	3	3	1
Animal Science	3*					Civil, Electr., Mech.	2			2*		Medicine and Surgery	2	2			
Food Science	3		2			English Literature	3		3			Anatomy	1	1			
Horticulture	3					Environmental Studies	3					Biochemistry	1	1			
Plant Science/Protection	3			1		Fine Arts				3		Parasitology	1	1			
Research Methods	3					Fisheries	1*					Pharmacology	1	1			
Soil Science	3			1		Forestry	3*					Physiology	1	1			
Anthropology		3	3	3		Geography	3	3	3			Nursing	*				
Architecture					2*	Geology	3	3				Performing Arts				3	
Biochemistry	3	3		1		History	3	3	3			Petroleum					1*
Biological Sciences				3		Home Technology	3*					Pharmaceutical Sciences				2	
Biology	3	3	3	1		Indian Studies	3					Philosophy	1			3	
Botany		3	1	1		Interpretation		*				Physics	3	3	3	3	1
Ecology		3		1		Islamic Studies		3	2			Planning (Urban & Regional)		1		3	1*
Genetics		3	1	1		Languages:		1*	1			Political Science			3	3	
Physiology		3	1	1		Arabic						Polymer Science				2	
Virology	1					Burmese				1		Property Management					1*
Zoology		3	1	1		Dutch		1*	1			Psychology	1	1	3	3	
Business Administration		3	1			English	1	1*	1		1	Race Relations				3	
Chemistry	3	3	3	3	1*	French		1*	1	1		Rural Studies				3	
Chinese Studies		3				German		1*	1			Sociology	1	3	3	1	
Commerce			3			Italian		1*				Statistics		3	1	1	
Communications	1		3	3		Japanese		1*	1	1		Surveying, Land		1	1	1	2*
Computer Science	1	1*	3			Korean				1		Quantity					2*
Dentistry		2				Malay	1	1*	1	1		Teaching English as 2nd Language		*			
Economics		3	3	1		Mandarin		1*	1	1		Translation		*			
Accounting	1	3	1			Russian		1*				Urban Studies				3	
Analytical		3	1			Tagalog		1*				Veterinary Medicine	3				
Applied		3				Tamil		1*									
						Thai		1*	1	1							
						Vietnamese				1							

and (iii) to unite the various races so that a united Malaysian nation will evolve. The preamble to the Education Act of 1961 sums up these aims as follows: 'The education policy of the Federation originally declared in the Educational Ordinance, 1957 is to establish a national system of education which will satisfy the needs of the nation and promote its cultural, social, economic and political development... and for the progressive development of an educational system in which the national language is the main medium of instruction.'

Although primary education is not compulsory, actually more than 90 per cent. of the children above the age of five attend at least primary schools. By 1975 all subjects except English were being taught through the medium of the national language. Subsequently, by yearly stages this policy will be implemented through the secondary and tertiary levels.

Six years of primary education are followed by three years of lower secondary education, at the end of which a pupil takes the Lower Certificate of Education (LCE) examination. If he passes that examination he continues with another two years of upper secondary education when he will take the Malaysian Certificate of Education (MCE) examination for English medium students or the Sijil Pelajaran Malaysia (SPM) examination for Malay-medium students. Those who pass well may then gain admission to the 2-year sixth form classes, culminating in their taking the Cambridge Higher School Certificate (HSC) examination or the Cambridge Sijil Tinggi Persekoiah examination (for Malay-medium students) which is the educational requirement for admission to the local universities.

By 1980, the medium of instruction up to upper secondary level will be the national language.

Admission (see also Appendix III). With the exception of the University of Technology, admission to the universities is handled and processed by the Central Admission Unit (Unit Pusat Universiti universiti or UPU) of the ministry of education. Although admission requirements and selection are left to the individual universities, policy guidelines are laid down by the ministry which is advised by a consultative admissions committee chaired by its deputy secretary and with the university registrars as members. The UPU prepares lists of candidates in rank order according to first choice courses, in rank order according to first choice courses, *bumiputra* and non *bumiputra* groups and academic merit, and forwards these lists to the respective universities to carry out the selection exercises, after which there is a 'clearing house' operation.

The minimum education requirements for admission are generally the same for the universities (except for the University of Technology), i.e. a pass in the Malaysian Certificate of Education (MCE) or equivalent examination and a pass in the Cambridge Higher School Certificate or equivalent examination (with a pass in the general paper and in two subjects at principal (advanced) level or one subject at principal level and two subjects at subsidiary (ordinary) level taken at one and the same examination. In addition, candidates must fulfil the subject requirements of the respective faculty or school. These are only minimum entry requirements. In practice, owing to limited places available in the universities, candidates cannot be certain of obtaining places competitively unless they have passes in three or four subjects at principal level. Of the total of 11,683 applicants who met the minimum entry requirements for admission to degree courses in the four universities serviced by the UPU in the 1977-78 session, only 3741 (or 32 per cent.) were admitted. These figures do not include those who applied for

and were admitted to diploma/certificate courses, the University of Technology and polytechnics.

The University of Technology handles its own admission since its minimum entry requirement is a pass in the MCE or equivalent examination, with at least Grade II and five credits in Malay, elementary mathematics and three other subjects chosen from a range of mathematical, physical science, science or technical subjects, and a pass in English or lower English.

Admissions to diploma, certificate, pre-university or matriculation courses are handled and processed separately by the individual universities. Pre-university or matriculation courses in the sciences are open only to *bumiputra* candidates; the admission requirement is either a pass in the MCE or equivalent examination or a pass in the HSC or equivalent examination below the university admission requirement.

First Degrees (see also Table on p. 1779). The duration and structure of degree courses are basically similar to those of other Commonwealth universities, with professional degrees being recognised by overseas bodies, e.g. the U.K. General Medical Council.

Off-Campus Academic Programme. The University of Science offers an off-campus academic programme to working persons who are unable to attend a university on a full-time basis. Introduced in June 1971 with an initial intake of 89 students and with a current enrolment of 838, the programme consists of three levels, with each level corresponding to the requirements of one year of full-time study. The students take two years to complete each of the first two levels and a total of five to six years to complete all courses for a degree. The first two levels involve home study, and materials and reading lists are sent to the students. They also attend a compulsory vacation course of 3-4 weeks' duration at each level of the course. Students are required to be full-time students on the campus for the third-year level courses. Courses available are in humanities, social sciences, physics and mathematics.

Diplomas and Certificates (see also Table on p. 1779). In addition to the postgraduate diploma courses in, for example, education, public administration, accounting and computer science offered by the University of Malaya, other universities offer basic diploma courses of 1-2 years' duration, in e.g. agriculture, science, architecture, quantity surveying, engineering, etc., aimed at producing middle-management staff. In addition, 1-2 year certificate courses in languages are also offered by the universities.

Postgraduate Study. As in many other countries, graduate studies and research in Malaysia are being orientated towards national needs. At this stage, the main need is for trained personnel to staff the new universities and to meet specialized manpower requirements of the public and private sectors of the country. However, its development can be said to be relatively slow because the universities have been concentrating on the development and consolidation of their undergraduate studies programme. Many local graduates still proceed overseas to obtain their higher degrees. Generally, all local universities offer higher degree programmes leading to master's or doctoral degrees.

A total of 659 higher degree candidates are now registered with the universities.

Staff. As in most Commonwealth universities, teaching posts are graded as professors, readers or

associate professors, and lecturers. The normal minimum qualification for appointment as lecturer is a master's degree in the relevant discipline. In addition, the universities employ teachers to teach languages, particularly the Malaysian language and English. Tutors are employed to provide teaching assistance while reading for higher degrees.

Teaching is by means of lectures, practicals, tutorials, seminars, assignments and field trips.

Teaching staff are normally appointed on probation of three years in the first instance, with prospects of tenure thereafter to the retiring age of 55 years which may be extended to the age of 60 years. Overseas staff are generally appointed on short-term contracts or on visiting arrangements. Permanent staff are entitled to 6 months of paid sabbatical leave after each period of 60 months of resident service. There are also provisions for 30-35 days of annual vacation leave and grant of leave of absence during vacation periods for approved research or field work.

Salaries per month are: professors, MS2965-MS3365; readers/associate professors, MS2525-MS2865; lecturers, MS1285-MS2425, with a starting point of MS1465 for holders of PhD or medical/dental qualifications. Provident fund or superannuation benefits are available at a contribution rate of 5 per cent. of salary by employee and 10 per cent. of salary by employer for the first 10 years with eligibility thereafter for emplacement on pensionable establishment to qualify for gratuity and pension benefits. Heads of academic departments are paid MS150 per month administrative duties allowance. Clinical staff designated as clinical specialists receive a clinical specialist allowance at the following rates: professors, MS1100-MS1200; associate professors, MS900-MS1100; lecturers, MS400-MS850. Housing is not provided but university houses if available, may be let to staff at rentals averaging MS200-MS350 per month.

Provision exists for academic staff participation in university government. Two representatives of senate serve as members of the university council. The deans, directors of centres, deputy deans, professors, heads of departments or chairmen of divisions, and academic representatives are members of the senate. The majority of the academic staff are members of faculties or school boards. There is also academic representation on other university bodies and committees.

Vacant posts are filled by advertisement and candidates are considered by selection boards. For chairs external assessors are appointed by the senate and in some universities also for posts of associate professor. Like many new universities in the Commonwealth, the Malaysian universities have been experiencing a shortage of trained and experienced academic staff, particularly those proficient to teach in the national language. By 1983 the medium of instruction in all Malaysian universities will be the national language. In view of this, the universities have embarked on academic staff training schemes under which suitably qualified local graduates are given further training to acquire higher degrees at local and overseas institutions.

Students. There was a total of 21,716 students enrolled in the five universities for degree, diploma and certificate courses in the 1977-78 academic year. These consisted of 20,492 full-time students and 1224 part-time students. These figures do not include students enrolled for certificate of proficiency courses in languages and non-graduating students, but include higher degree students. See also 'Statistics' below.

There is no bar relating to sex, race, religion,

nationality or class in the admission of students but the country's constitution provides for the Yang di Pertuan Agong to ensure the reservation of a fair proportion of educational or training privileges for Malays. Since local qualified candidates exceed the number of university places, few places are available for overseas candidates. At present, overseas students number less than 100.

The model university constitution provides for each university to have a students' union constituted of all the registered students of the university other than external students. The union elects a students' representative council (SRC), consisting of representatives of each faculty, institution or school, and the registered students as a whole. The SRC then elects from among its members a president, a secretary and treasurer who hold office for one year. The objects of the SRC are: (a) to foster a spirit of corporate life among the students of the university; (b) to organise and supervise, subject to the discretion of the vice-chancellor, student welfare activities in the university including recreational facilities, spiritual and religious activities and the supply of meals and refreshments; (c) to make representations to the vice-chancellor on all matters relating to, or connected with, the living and working conditions of the students; (d) to be represented on any body which may in accordance with an act made by the council for the purpose, be appointed to undertake student welfare activities in the university; and (e) to undertake such other activities as may be determined by the council from time to time.

The model constitution also provides for not less than ten students of a university, with the prior approval of the council and subject to such terms and conditions as the council may specify, to establish a student body consisting of students of the university for the promotion of a specific object or interest within the university.

With the amendment to the Universities and University Colleges Act in 1975, provision is made for a deputy vice-chancellor to be the disciplinary

authority of a university in respect of every student of the university. Any student dissatisfied with the decision of the deputy vice-chancellor may appeal to the minister of education who may summarily reject the appeal. In effect this has resulted in each university having a large student affairs department under a deputy vice-chancellor, who is responsible for the organisation, control and promotion of all student activities in the university. The amended act also prohibits the students' union and other student bodies from maintaining any funds of their own. All reasonable expenses incurred by these bodies are now met from university funds.

Student activities include taking part in the orientation of new students, sports, approved community services, conducting of student leadership programmes, approved exchange programmes with universities outside the country and promotion of cultural activities, etc. There is also a certain degree of student participation in the affairs of the university e.g. the president and the secretary of the SRC are members of the university court. Those living in university colleges or hostels have a large say on matters of food, recreational facilities and welfare problems of the residents.

Apart from the University of Agriculture which is fully residential, the other universities provide hostel accommodation for 30-50 per cent. of their students. More than 50 per cent. of the students are in receipt of scholarships, bursaries or financial aid from the central government, the state governments, statutory bodies or private firms. Limited university loans are also available to needy students.

Fees. Tuition fees for first degree courses are M\$660 p.a. for medicine and dentistry, M\$540 for engineering and science and M\$510 p.a. for other courses; M\$510-M\$690 p.a. for diploma courses; M\$600 p.a. for master's degrees in the faculty of medicine and M\$150-M\$225 p.a. research fee for other master's degree courses; and M\$225-M\$300 p.a. research fee for doctorate degrees. Hostel fees

vary from university to university depending on facilities provided e.g. the University of Malaya charges M\$330 for a term of 10 weeks for board, lodging and laundry charges.

Academic Year. Three universities operate on a two-semester system. The others are on 3-term system, each term consisting of 10 weeks, with a longer term for medical and dental students. All universities open in June/July of each year and end in February/April in the following year.

Inter-University Liaison. In August 1972 the minister of education set up a national Higher Educational Advisory Council to advise him 'on the development and co-ordination of existing universities, and other related matters referred to it by the Minister.' This council replaced the former Higher Educational Council set up in 1968 and has as its chairman Y. A. M. Justice Raja Tan Sri Azlan Shah (federal judge and pro-chancellor of the University of Science), ten members from west Malaysia and one each from the states of Sabah and Sarawak.

The higher education division of the ministry of education co-ordinates the work of all the universities. There is also an informal committee of vice-chancellors which meets once a month under the chairmanship of the minister of education. The registrars also meet once a month to discuss common problems and to arrive at uniform procedures for application to all universities.

There is no national association for university staff. The staff of each university belong to their own association but the representatives of these associations meet and consult each other from time to time on common matters relating to terms and conditions of service.

Further Information. For official and other publications issued by the universities, see the 'General Information' section of the university chapters.

STATISTICS

Student Numbers (1977-78) (first degree, higher degree and diploma courses; the numbers in brackets are those of women students included in the previous figure)

	Full-Time	Part-Time	Total
Univ. of Agriculture	2,961 (807)	—	2,961 (807)
Univ. of Malaya	8,276 (2904)	322 (92)	8,598 (2996)
National Univ.	3,855 (1251)	5 (0)	3,860 (1251)
Univ. of Science	2,502 (839)	897 (89)	3,399 (928)
Univ. of Technology	2,898 (631)	—	2,898 (631)
Total	20,492 (6432)	1224 (181)	21,716 (6613)

Distribution by Courses (full-time and part-time). Agric., 1709; archit., 419; arts, 5030; dent., 130; econ., 1881; educn., 220; engin., 2507; forestry, 130; Islamic studies, 649; law, 231; med., 1206; petroleum, 145; pharmaceut. scis., 182; sci., 5694; surv., 384; vet. med., 320; dipls. & certs., 879. Total: 21,716.

Included in the full-time and part-time figures above are:—

Postgraduate students, 659.

New admissions, 6685.

Students from other countries, 93.

Degrees Awarded (1977). Agric.: BAgSc, 79; BAgSc hon., 5; BAgBus, 23; MAgSc, 17; PhD, 1. Arts: BA, 252; BA hon., 1132; BAEducn, 2; BA Educn hon., 50; B1stStudies, 147; B1stStudies hon., 61; BLitt, 47; BLitt hon., 40; BSocSc, 13; BSocSc

hon., 189; MA, 11; MSocSc, 3; PhD, 2. Dent.: BDS, 28. Econ.: BEc, 276; BEc hon., 324; MEc, 3. Educn.: MEd, 9; PhD, 1. Engin.: BE, 64; BE hon., 190; MEngSc, 1. Law: LLB, 54. Med.: MB BS, 124; MD, 2; MPH, 8; MPath, 3; MPsyMed, 1. Sci.: BSc, 522; BSc hon., 399; BAppSc hon., 38; BSc Educn, 23; BScEducn hon., 118; BSc(HBP), 24; BScForestry, 25; BPharmSc hon., 36; MSc, 29; MSc(Planning), 5; PhD, 5.

Diplomas Awarded (1977). DPA, 16; DipEd, 1154; DipAcc, 34; DipCompSc, 14; DipBA, 15; DipInterpretation, 1; DipTranslation, 4; DipAgri, 271; DipScicumEd, 123; DipHomeTech, 24; Dip Fish, 20; DipAnHealth&Prod, 41; DipArch, 27; DipCivilEng, 113; DipElecCom, 59; DipElecPower, 56; DipMechEng, 106; DipQS, 13; DipScEducn, 48; DipSurvey, 27; DipUrban&RegionalPlanning, 14.

Certificates Awarded (1977). Lang. proficiency, 144; TESL, 55.